

From the:  
INTERNATIONAL SEARCHING AUTHORITY

To:  
  
Cullen & Co  
GPO Box 1074  
BRISBANE QLD 4001

**PCT**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) **17 MAR 2006**

Applicant's or agent's file reference  
**051009PC**

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
**PCT/AU2005/001931**

International filing date (day/month/year)  
**20 December 2005**

Priority date (day/month/year)  
**20 December 2005**

International Patent Classification (IPC) or both national classification and IPC  
Int. Cl.

**E01C 13/02 (2006.01) E01C 9/00 (2006.01) E01C 13/00 (2006.01) INT. CL.**  
**C09K 17/12 (2006.01)**

**ACTION DATE: 09 MARCH 2006**

Applicant

**GREENGAUGE PTY LTD et al**

**1. This opinion contains indications relating to the following items:**

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input checked="" type="checkbox"/> | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input checked="" type="checkbox"/> | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the IPEA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaustalia.gov.au  
Facsimile No. (02) 6285 3929

Date of completion of this opinion

**09 March 2006**

Authorized Officer

**VINCE BAGUSAUSKAS**  
Telephone No. (02) 6283 2110

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of:
  - ☒ The international application in the language in which it was filed
  - ☐ A translation of the international application into, \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3(a) and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☐ on paper
    - ☐ in electronic form
  - c. time of filing/furnishing
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in electronic form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

international application NO.

PCT/AU2005/001931

**Box No. III**      **Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application
- ☒ claims Nos: **16, 26-42** NOTE that a partial search on claim 26 was conducted.

because:

- ☐ the said international application, or the said claim Nos.  
relate to the following subject matter which does not require an international search (*specify*):

- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos.  
are so unclear that no meaningful opinion could be formed (*specify*):

- ☐ the claims, or said claims Nos.  
are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

- ☒ no international search report has been established for said claims Nos. **16, 26-42**

- ☐ a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

- ☐ furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
- ☐ furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
- ☐ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

- ☐ a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Searching Authority in a form and manner acceptable to it.

- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

- ☐ See Supplemental Box for further details.

**Box No. IV Lack of unity of invention**

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the applicable time limit:

☐ paid additional fees

☐ paid additional fees under protest and, where applicable, the protest fee

☐ paid additional fees under protest but the applicable protest fee was not paid

☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

☐ complied with

☒ not complied with for the following reasons:

This International Application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

In assessing whether there is more than one invention claimed, I have given consideration to those features which can be considered to potentially distinguish the claimed combination of features from the prior art. Where different claims have different distinguishing features they define different inventions.

This International Searching Authority has found that there are different inventions as follows:

- Claim Group 1: Claims 1 to 15, 17 to 25 are directed to a base for a playing field. It is considered that the binder applied to the base particulate layer so that said layer is porous to water comprises a first distinguishing feature.
- Claim Group 2: Claim 16 is directed to a binder that is applied to particulate material. It is considered that the optional feature that binder "may have rheological properties that are controlled such that the binder can penetrate to the desired degree prior to setting comprises a second distinguishing feature
- Claim Group 3: Claims 26 to 42 are directed to a binder composition 'for use' in producing a base for a playing field. It is considered that the binder being a silicate based binder having at least one setting agent and a surfactant comprises a third distinguishing feature.

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

Each of the abovementioned Claim Groups have a different distinguishing feature and they do not share any feature which could satisfy the requirement for being a special technical feature. Because there is no common special technical feature it follows that there is no technical relationship between the identified inventions. Therefore the claims do not satisfy the requirement of unity of invention *a priori*.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

☐ all parts

☒ the parts relating to claims Nos. 1 to 15, 17 to 25. Claims 26-33, 39-42 as noted in the ISR

**Box No. V** Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1 to 15, 17 to 25, 26-33, 39-42	YES
	Claims	NO
Inventive step (IS)	Claims 1 to 15, 17 to 25	YES
	Claims 26-33, 39-42	NO
Industrial applicability (IA)	Claims 1 to 15, 17 to 25, 26-33, 39-42	YES
	Claims	NO

## 2. Citations and explanations:

The relevant citations from the ISR are:

D1) PQ Corporation, 'Soluble silicates in Geotechnical Grouting Applications'

D2) PQ Corporation, 'PQ Products for Agglomeration'

D3) PQ Corporation, 'Geotechnical and Grouting'

D4) PQ Corporation, 'Environmentally Safe Binders for Agglomeration'

**INVENTIVE STEP**

Claim 26 defines a binder composition "for use" in producing a playing field. It is considered that a person skilled in the art on reading D3) would combine its teachings with D2) to arrive at the composition as defined in claims 26 and 33. Thus claims 26, 33 is not considered to have an inventive step over the prior art. D3) also discloses the features of claims 27 and 28 and they too lack an inventive step. It would be obvious to combine the teachings of D2) and D3) and thus claims 27 and 28 lack an inventive step.

D1) discloses the use of silicate based binder for soil stabilization. Furthermore it discloses the pH values as defined in claims 29. It would be obvious to combine the teaching of this citation with that of D2) and D3) and thus claim 29 lacks an inventive step.

D4) discloses that a "typical silicate/setting agent binder system would contain approximately 80% silicate and 20% setting agent". It is considered that this disclosure in combination with that of D3) and D1) would be obvious and thus claims 30 to 32, 39 lack an inventive step.

It is considered that it would be obvious to the person skilled in the art that the setting time of the binder composition of D3) can be varied. D1) discloses various set times for grout compositions. Therefore it is considered that the teachings of claims 40 to 42 lacks an inventive step.